

IN THE CLAIMS

Please amend the claims as follows:

1 1. (currently amended) An apparatus for controlling modulation of an alternating waveform
2 on a direct current (DC) signal intended for a load, said apparatus comprising:

3 a DC power supply for providing a DC voltage; and

4 a mixing/switching circuit configured to having a first transistor and a capacitor
5 for adding a modulating signal to said DC voltage and to for selectively allowing said
6 modulated DC voltage to supply said load, wherein said mixing/switching circuit includes
7 a common control signal input for controlling said adding function and said selectively
8 allowing function.

2. cancelled

1 3. (currently amended) The apparatus of Claim 2 1, wherein said first transistor is an NPN
2 Darlington transistor.

1 4. (original) The apparatus of Claim 1, wherein said mixing/switching circuit includes a
2 second and third transistors, two resistors and two diodes for selectively allowing said modulated
3 DC voltage to supply said load.

1 5. (original) The apparatus of Claim 4, wherein said second transistor is a PNP transistor and
2 said third transistor is an NPN transistor.

1 6. (original) The apparatus of Claim 1, wherein said apparatus operates either in a
2 modulation mode or in a disconnect mode.

1 7. (original) A low-noise block (LNB) control device capable of controlling modulation of
2 an alternating waveform on a direct current (DC) voltage from a DC power supply to an LNB
3 amplifier, said LNB control device comprising:

4 a power supply feedback line for receiving a power supply feedback signal from
5 said DC power supply;

6 a power supply control line for sending a control signal to said DC power supply
7 in response to said received power supply feedback signal;

8 an LNB amplifier feedback line for receiving a LNB amplifier feedback signal
9 from said LNB amplifier; and

10 a modulating/switch control line for sending a modulating/switch control signal to
11 a mixing/switching circuit in response to said received LNB amplifier feedback signal,
12 wherein said modulating/switch control signal adds a modulating waveform to said DC
13 voltage and selectively allows said modulated DC voltage to reach said LNB amplifier.

1 8. (original) The LNB control device of Claim 7, wherein said mixing/switching circuit is
2 coupled between said DC power supply and said LNB amplifier.

1 9. (original) The LNB control device of Claim 8, wherein said mixing/switching circuit is
2 configured to add a modulating signal to said DC voltage and to selectively allow said modulated
3 DC voltage to supply said LNB amplifier, wherein said mixing/switching circuit includes a
4 common control signal input for controlling said adding function and said selectively allowing
5 function.

1 10. (original) The LNB control device of Claim 9, wherein said mixing/switching circuit
2 includes a first transistor and a capacitor for adding said modulating signal to said DC voltage.

1 11. (original) The LNB control device of Claim 10, wherein said first transistor is an NPN
2 Darlington transistor.

1 12. (currently amended) The LNB control device of Claim 9 10, wherein said mixing/
2 switching circuit includes a second and third transistors, two resistors and two diodes for
3 selectively allowing said modulated DC voltage to supply said load.

1 13. (original) The LNB control device of Claim 12, wherein said second transistor is a PNP
2 transistor and said third transistor is an NPN transistor.

1 14. (original) The LNB control device of Claim 9, wherein said mixing/switching circuit
2 operates either in a modulation mode or in a disconnect mode.